

State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER U-R-4-88
Relating to Certification of New Off-Road Compression-Ignition Engines

DEERE POWER SYSTEMS GROUP OF DEERE & COMPANY

Pursuant to the authority vested in the Air Resources Board by Sections 43013, 43018, 43101, 43102, 43104 and 43105 of the Health and Safety Code; and

Pursuant to the authority vested in the undersigned by Sections 39515 and 39516 of the Health and Safety Code and Executive Order G-45-9;

IT IS ORDERED AND RESOLVED: That the following compression-ignition engine and emission control system produced by the manufacturer are certified as described below for use in off-road equipment:

Model Year: 2001

Typical Equipment Usage: Loader, tractor and pump

Fuel Type: Diesel

	Engine		
	Displacement	Useful Life	Emission Control Systems
<u>Engine Family</u>	<u>(liters)</u>	<u>(hours)</u>	<u>and Special Features</u>
1JDXL08.1008	8.1	8000	Direct Diesel Injection Turbocharger Charge Air Cooler

Engine models and codes are listed on attachments. Production engines shall be in all material respects the same as those for which certification is granted.

The exhaust emission certification standards and certification values for hydrocarbons (HC), oxides of nitrogen (NOx), or non-methane hydrocarbons plus oxides of nitrogen (NMHC+NOx), carbon monoxide (CO), and particulate matter (PM) (units are expressed in grams per kilowatt-hour (g/kw-hr)), and the opacity-of-smoke certification standards and certification values in percent (%) during acceleration (Accel), lugging (Lug), and the peak value from either mode (Peak) for this engine family are as follows (Title 13, California Code of Regulations, Section 2423):

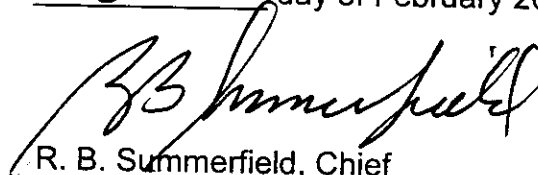
Engine Power Rating (kw)	Emission Standard Category	Exhaust Emissions (g/kw-hr)					Smoke Opacity (%)			
		HC	NOx	NMHC+NOx	CO	PM	Accel	Lug	Peak	
130≤KW<225	Tier 1	Standard	1.3	9.2	N/A	11.4	0.54	20	15	50
		Certification	0.7	8.7	--	1.6	0.20	14	6	21

BE IT FURTHER RESOLVED: That the listed engine models also comply with "Emission Control Labels— 1996 and Later Off-Road Compression-Ignition Engines" (Title 13, California Code of Regulations, Section 2424) for the aforementioned model-year.

BE IT FURTHER RESOLVED: That for the listed engine models, the manufacturer has submitted the materials to demonstrate certification compliance with the Board's emission control system warranty provisions (Title 13, California Code of Regulations, Sections 2425 and 2426).

Engines certified under this Executive Order must conform to all applicable California emission regulations.

Executed at El Monte, California this 6th day of February 2001.


R. B. Summerfield, Chief
Mobile Source Operations Division

ATTACHMENT

Engine Model Summary Form

ED# U-R-4-88

Manufacturer: Deere Power Systems Group of Deere & Company

Engine category: Nonroad CI

EPA Engine Family: 1JDXL08.1008

Mfr Family Name: 450AA

Process Code: New Submission

1.Engine Code	2.Engine Model	3.BHP@RPM (SAE Gross)	4.Fuel Rate: mm/stroke @ peak HP (for diesel only)	5.Fuel Rate: (lbs/hr) @ peak HP (for diesels only)	6.Torque @ RPM (SEA Gross)	7.Fuel Rate: mm/stroke@peak torque	8.Fuel Rate: (lbs/hr)@peak torque	9.Emission Control Device Per SAE J1930
6081AF001A	6081A	275@2200	134@2200	98@2200	919@1400	191@1400	76@1400	DP1 TC, CAC, EM
6081AF001B	6081A	251@2200	120@2200	89@2200	784@1400	151@1400	71@1400	DP1 TC, CAC, EM
6081AF001E	6081A	275@2200	131@2200	97@2200	835@1400	159@1400	75@1400	DP1 TC, CAC, EM
6081AF001F	6081A	251@2200	120@2200	89@2200	784@1400	151@1400	71@1400	DP1 TC, CAC, EM
6081AT001	6081A	190@2100	106@2100	75@2100	783@1000	155@1000	52@1000	DP1 TC, CAC, EM
6081AF001G	6081A	225@2200	111@2200	82@2200	762@1400	148@1400	70@1400	DP1 TC, CAC, EM
6081AT002	6081A	181@2100	95@2100	66@2100	608@1400	119@1400	55@1400	DP1 TC, CAC, EM
6081AN001	6081A	249@2200	120@2200	89@2200	785@1400	151@1400	71@1400	DP1 TC, CAC, EM
6081AF001H	6081A	200@2200	100@2200	73@2200	683@1300	139@1300	64@1300	DP1 TC, CAC, EM
6081AF001C	6081A	251@1800	138@1800	84@1800	NA	NA	NA	DP1 TC, CAC, EM
6081AF001D	6081A	300@1800	169@1800	103@1800	NA	NA	NA	DP1 TC, CAC, EM
6081AF001I	6081A	251@2200	122@2200	90@2200	796@1400	150.6@1400	71@1400	DP1 TC, CAC, EM
6081AF001K	6081A	225@2200	111@2200	82@2200	760@1400	143.7@1400	68@1400	DP1 TC, CAC, EM

EPA cert No: JDX-NR-01-04

Engine Model Summary Form

EDIF U-R-4-88

Manufacturer: Deere Power Systems Group of Deere & Company

Engine category: Nonroad CI

EPA Engine Family: 1JDXL08.1008

Mfr Family Name: 450AA

Process Code: Running Change

1.Engine Code	2.Engine Model	3.BHP@RPM (SAE Gross)	4.Fuel Rate: mm/stroke @ peak HP (for diesel only)	5.Fuel Rate: (lbs/hr) @ peak HP (for diesels only)	6.Torque @ RPM (SEA Gross)	7.Fuel Rate: mm/stroke@peak torque	8.Fuel Rate: (lbs/hr)@peak torque	9.Emission Control Device Per SAE J1930
6081ATJ01	6081A	251@2200	120@2200	89@2200	784@1400	151@1400	71@1400	TC, CAC, EM
6081ATJ02	6081A	200@2200	100@2200	73@2200	683@1300	139@1300	64@1300	TC, CAC, EM